

(No Model.)

Q. A. SHUFORD.
ANAL SPECULUM.

No. 424,140.

Patented Mar. 25, 1890.

Fig. 1.

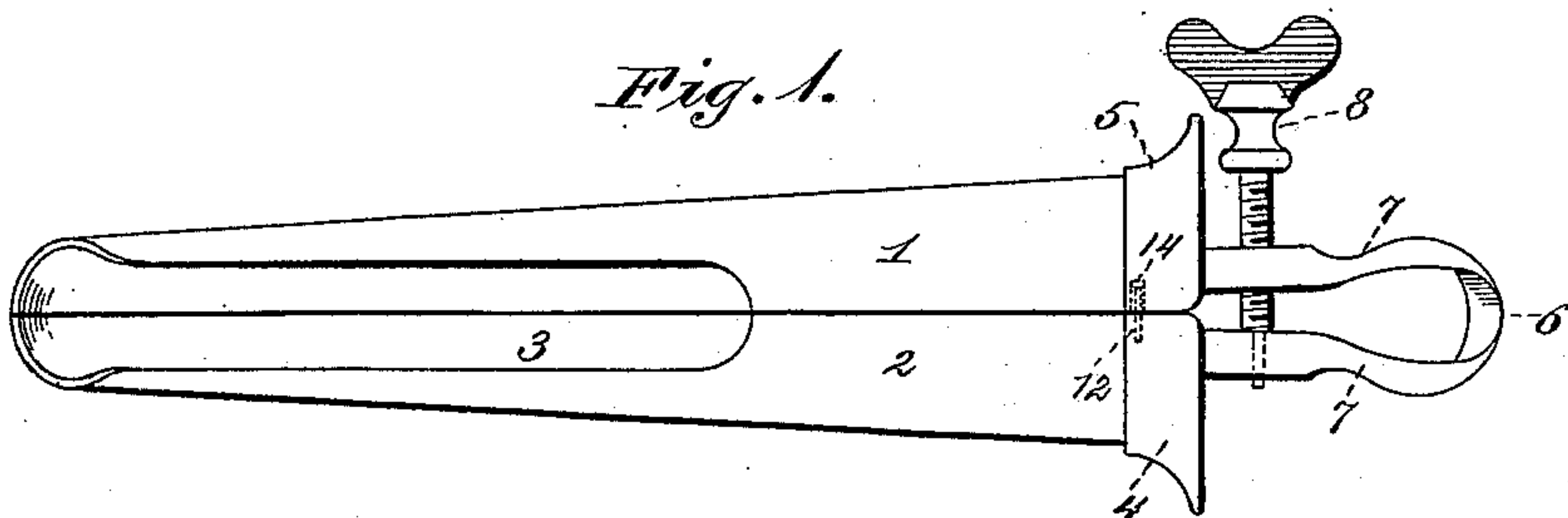


Fig. 2.

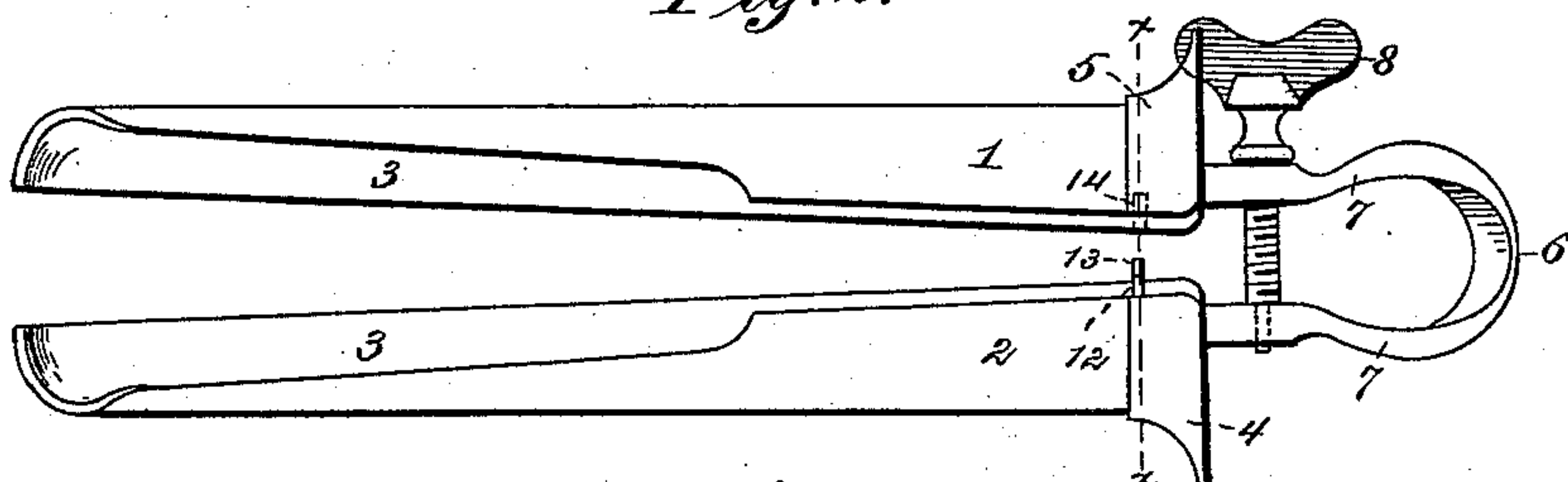


Fig. 3.

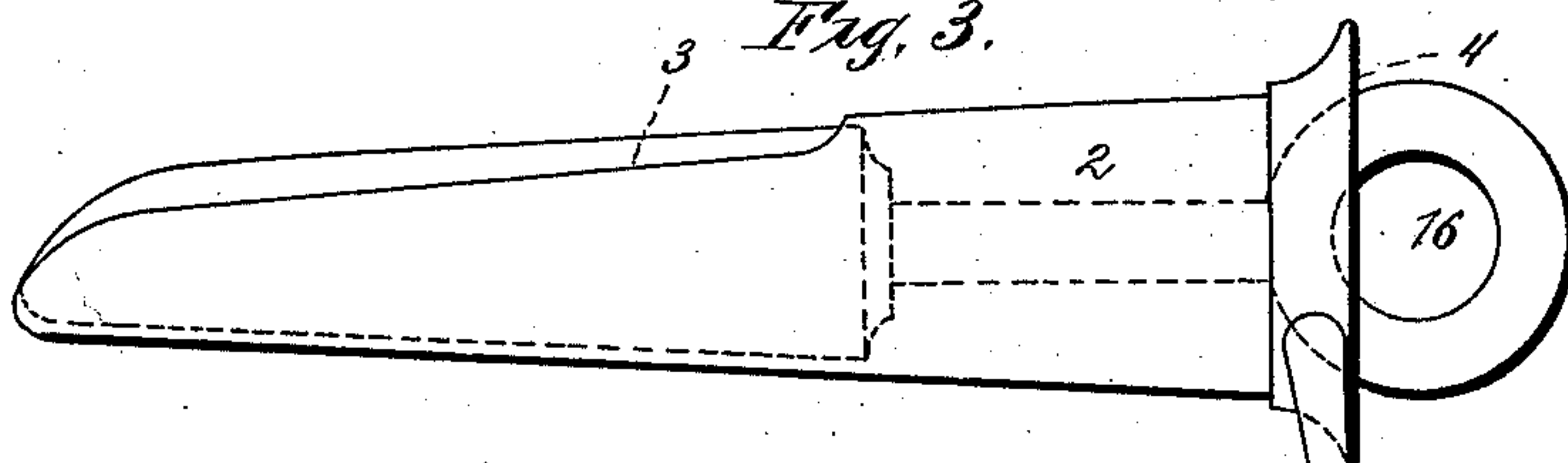


Fig. 4.

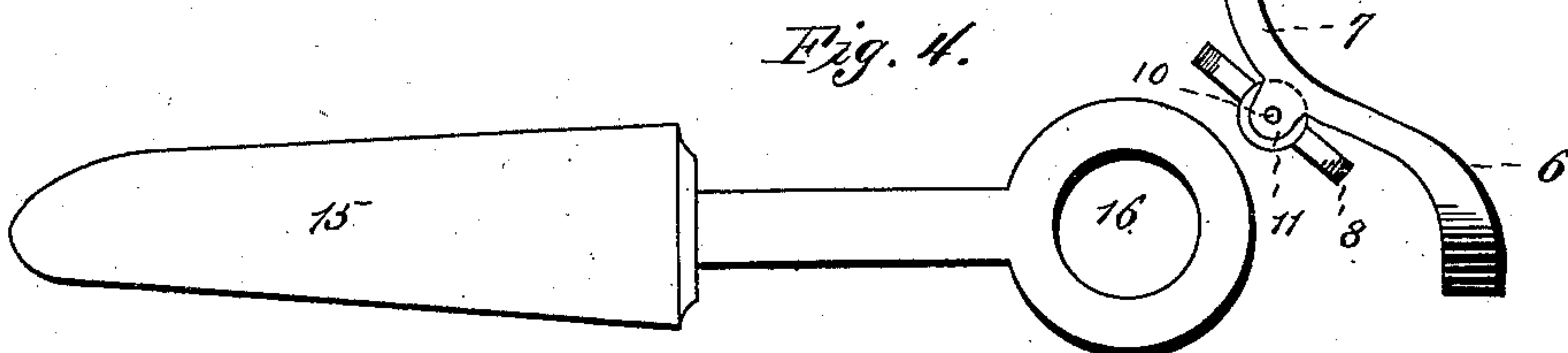


Fig. 5.

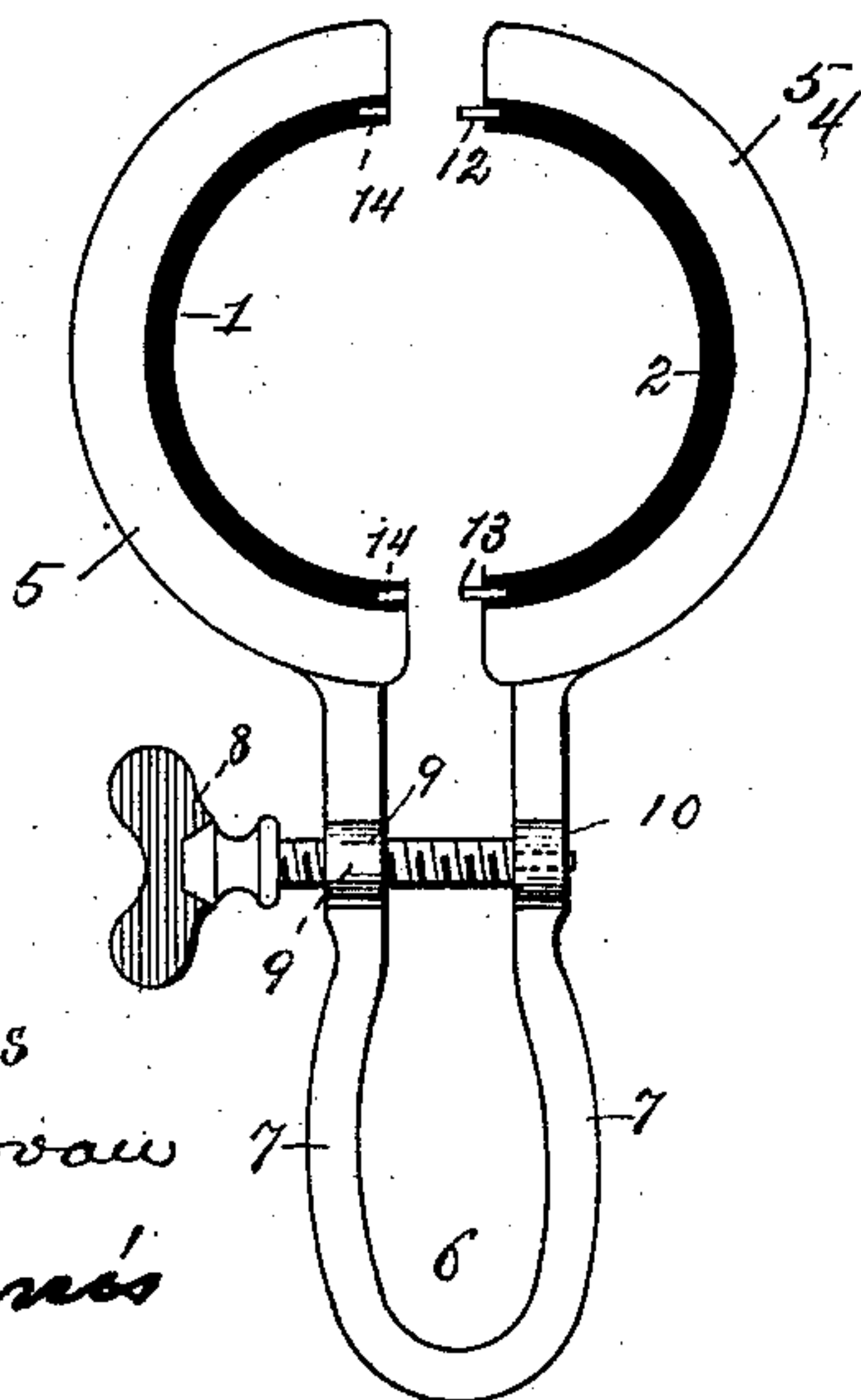
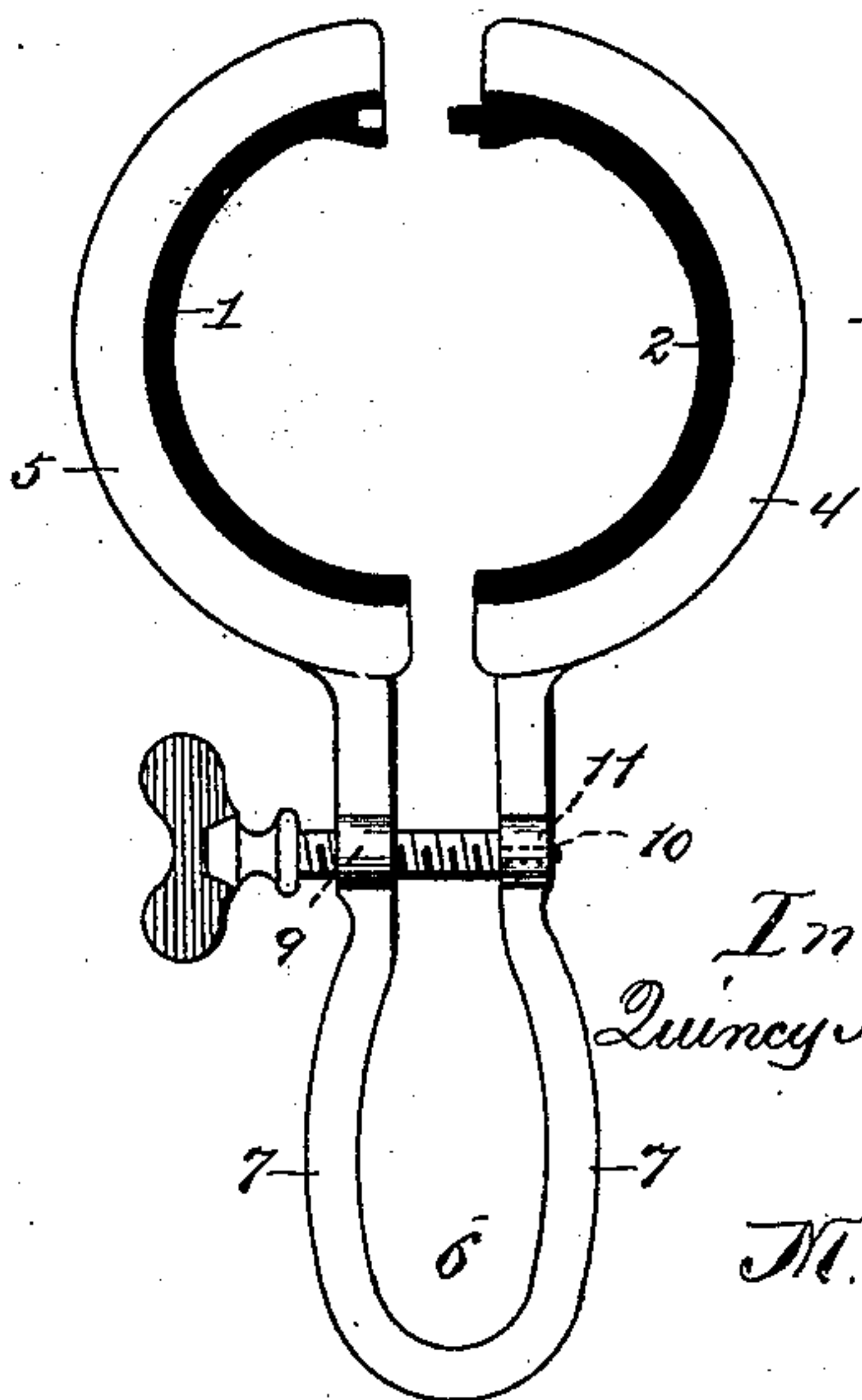


Fig. 6.



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ANAL SPECULUM.

SPECIFICATION forming part of Letters Patent No. 424,140, dated March 25, 1890.

Application filed January 23, 1890. Serial No. 337,869. (No model.)

To all whom it may concern:

Be it known that I, QUINCY ADAMS SHUFORD, a citizen of the United States, residing at Tyler, in the county of Smith and State of Texas, have invented certain new and useful Improvements in Anal Speculums; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention has relation to anal speculums; and it consists in the construction and novel arrangement of parts, as hereinafter more fully described, illustrated in the accompanying drawings, and pointed out in the appended claims.

The objects of my invention are, first, to so construct the several parts that there will be no rough or raised edges to interfere with its insertion in the anal passage; secondly, to so construct my improved speculum that it may be readily used as a bi-valve or dilator; thirdly, to form a locking-joint on the meeting edges of the shells forming the speculum, whereby the sections are prevented from overlapping each other to avoid pinching or injury to the walls of the anal passage while the instrument is being inserted; fourthly, to provide a plug for my improved speculum, whereby the contour of the outer surface of the speculum is maintained.

In the drawings, Figure 1 is a top view of my improved speculum; Fig. 2, a top view showing the instrument as a bi-valve or dilator; Fig. 3, a side view of my improved speculum; Fig. 4, a detail view of the plug; Fig. 5, a transverse section on the line $x x$ of Fig. 2; Fig. 6, a transverse section of a slight modification of my improved speculum.

Referring to the accompanying drawings, in which like numerals indicate corresponding parts in all the figures, 1 and 2 designate tapering semi-cylindrical shells cut away on their upper edges for about two-thirds of their length to form an elongated fenestra 3, terminating at its outer end in an elliptical form somewhat wider than the fenestra. At the bases of the shells are formed flanges 4 and 5, which, while serving as a strengthening-brace to hold the shells, which are constructed of

thin metal, to their proper curve, serves also as a guard or shield to prevent the hair from interfering with the operator.

6 indicates a handle U-shaped in form, the legs 7 of which are made integral with or secured in any desired manner to the flanges. This handle, which is constructed of material having considerable spring, serves to hold the shells, as shown in Fig. 1.

In order that my speculum may be readily used as a bi-valve or dilator, I employ a thumb-screw 8, which passes through a threaded opening in a lug 9 on one leg of the handle and has its opposite end reduced in diameter, and passes through an opening 10 in a lug 11 on the opposite leg of the handle.

As my improved speculum is made in two sections, and as there would be liability of the edges of the shells lapping one another and injuring or pinching the walls of the anal passage during its insertion, I form a lock on the meeting edges of the shells, as follows: At the junction of the flange 4 with the shell 1, at the top and bottom thereof, dowels 12 and 13 are placed, designed to enter suitable registering openings 14 in the flange 5.

To allow the speculum to be painlessly inserted in the anal passage, the apices of the shells 1 and 2 are given a slight curve upward, as shown in Figs. 2 and 3.

In order that the fenestra may be closed and a uniform exterior surface be presented to my speculum, I employ a tapering plug 15 of the contour of the interior of the speculum, the forward end of which is chamfered off to correspond with the elliptical opening at the end of the fenestra. The plug is provided with a suitable handle 16, by means of which it may be readily withdrawn from the speculum when the latter has been inserted in the anal passage. The meeting edges of the shells are slightly rounded, as well as the edges of the fenestra and elliptical opening, whereby all danger of cutting the walls of the anal passage is overcome.

In Fig. 6 I have shown a transverse section of a modified form of constructing the lock, which is as follows: The edges of the shells from the fenestra to the flanges are made a little thicker, and on one shell is formed a

tongue designed to enter a groove formed in the opposite shell.

The operation of my improved speculum, which can be readily used as a bi-valve or dilator, taken in connection with above description, will be readily understood by those skilled in the art.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The tapering semi-cylindrical shells cut away at their upper edges to form a fenestra, the forward part of which is elliptical in shape, and provided at their base with a flange and connected by a U-shaped handle, substantially as described.

2. The combination, with the tapering semi-cylindrical shells cut away at their upper edges to form a fenestra, and provided at their base with a flange united by a U-shaped han-

dle, of a lock formed on the meeting edges of the shells, substantially as described.

3. In a combined speculum and bi-valve or dilator, the combination, with the tapering semi-cylindrical shells cut away at their upper edges to form a fenestra, of a lock formed on the meeting edges of the shells, said shells having their apices bent upward and provided at their base with a flange and united by a U-shaped handle, the thumb-screw passing through a threaded opening in a lug formed on one leg of the handle and having a bearing in a perforated lug on the opposite leg of the handle, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

QUINCY ADAMS SHUFORD.

Witnesses:

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N. C. HARRIS.